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Practices and International Prospects in Textile Circulation

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Practices and International Prospects in Textile Circulation

Senior Scientist Pirjo Heikkilä VTT

Specializing in bio- and circular economy in the Baltic Sea Region – seminar, 26.3.2019 Tampere

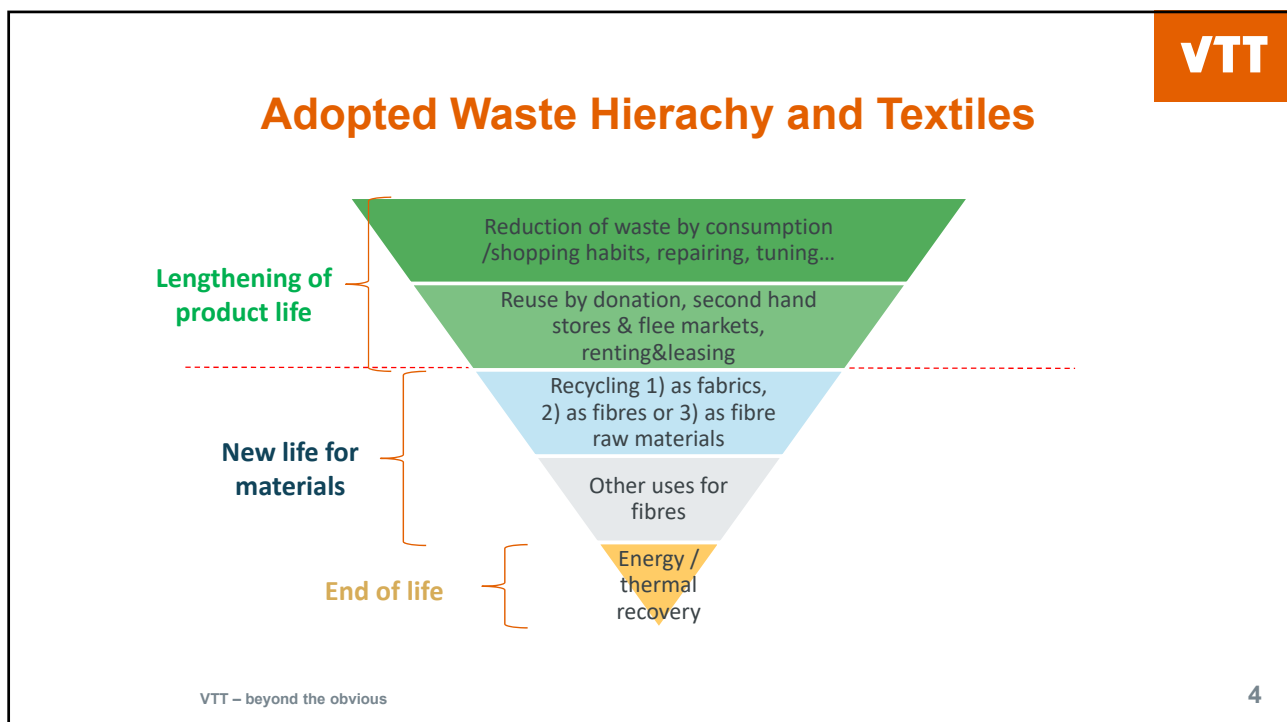
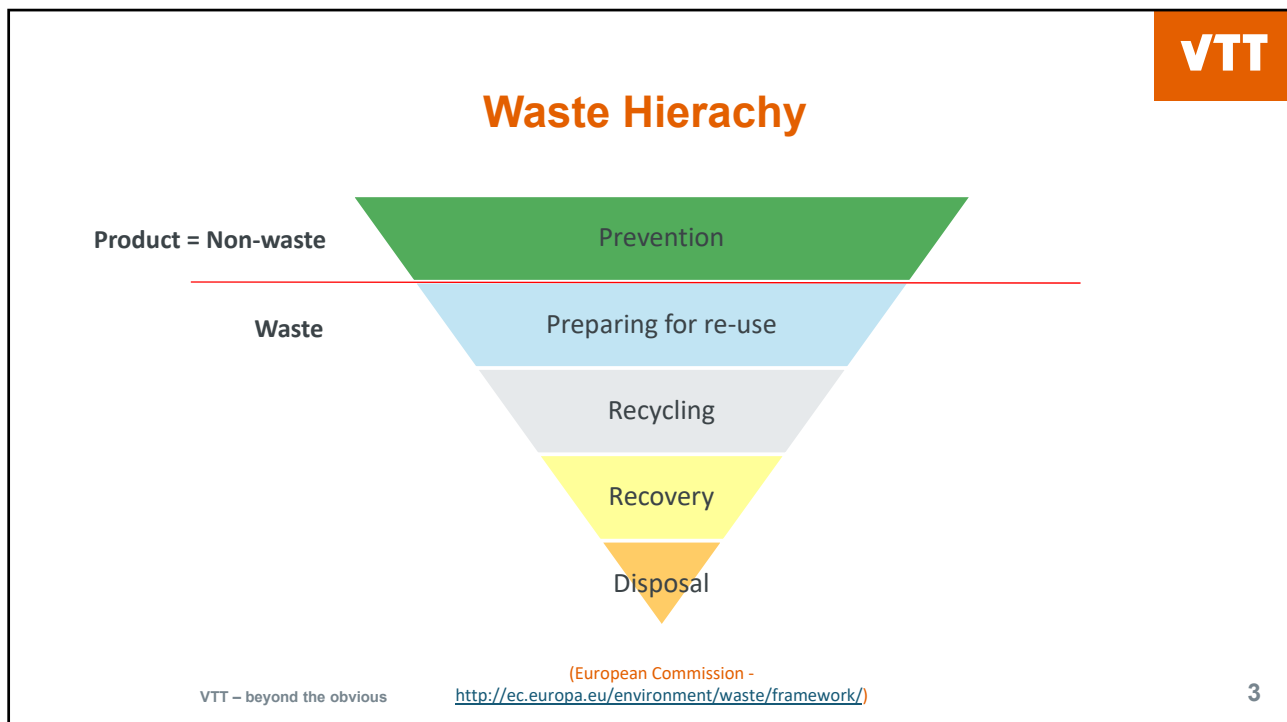
26.3.2019 VTT – beyond the obvious 1

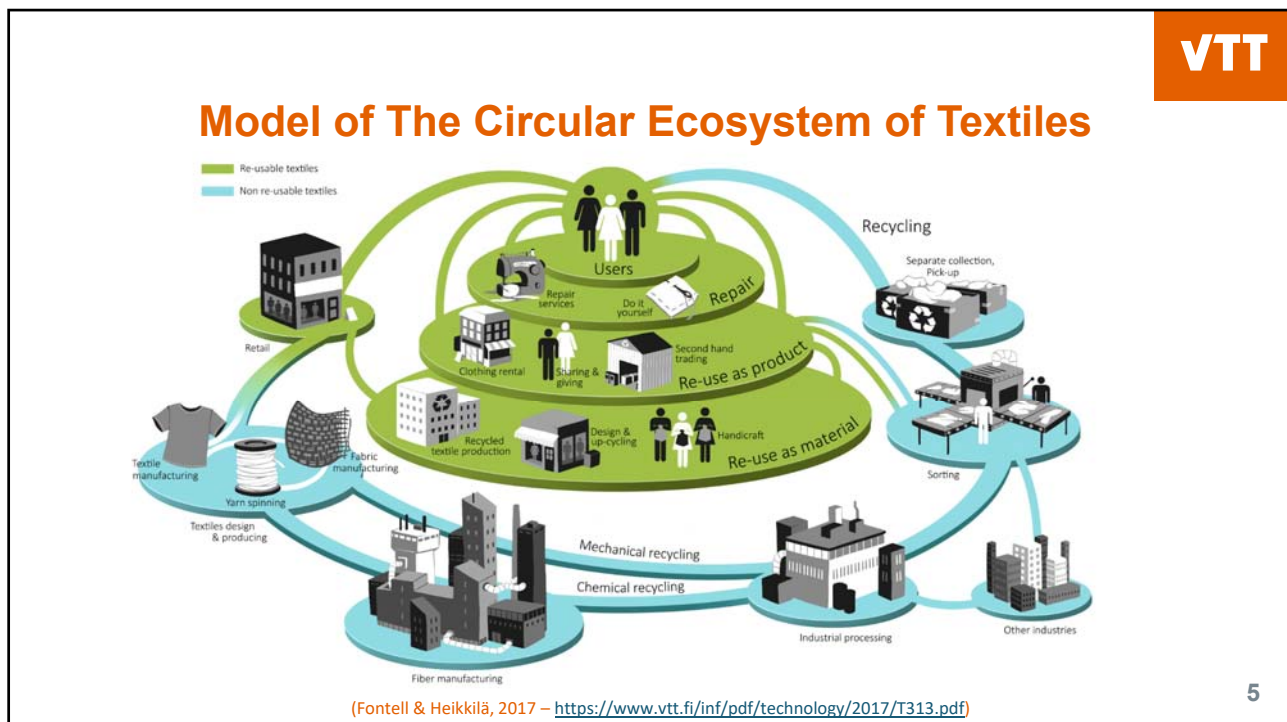


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Target of circular economy:
Maintain the value of products and materials as high as possible for the maximum of time with the minimum environmental impact.

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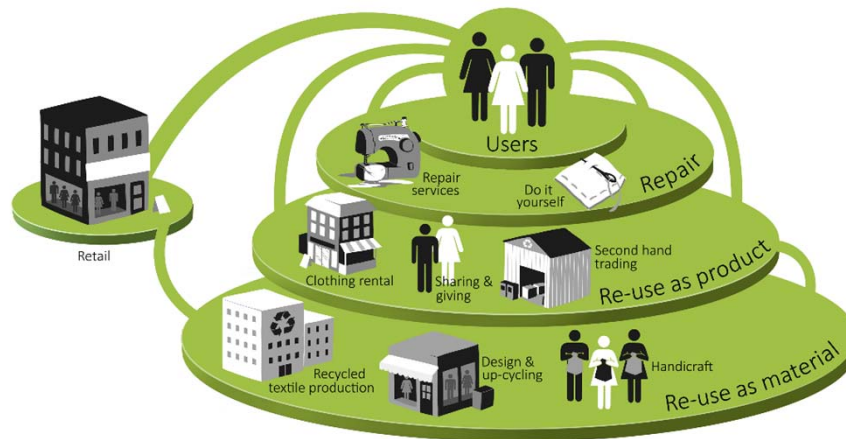
What we have?

What is still missing?

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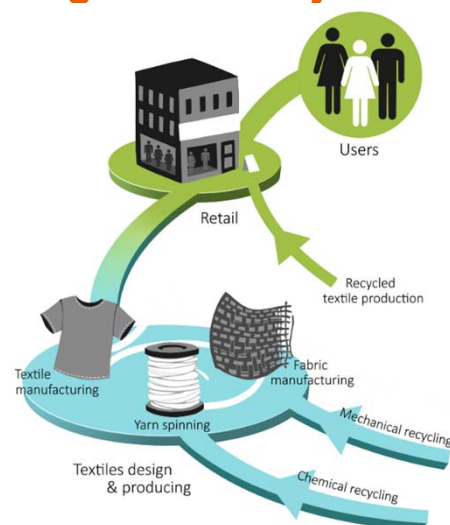
Existing – expected be increase in CE



(Fontell & Heikkilä, 2017 – <https://www.vtt.fi/inf/pdf/technology/2017/T313.pdf>)

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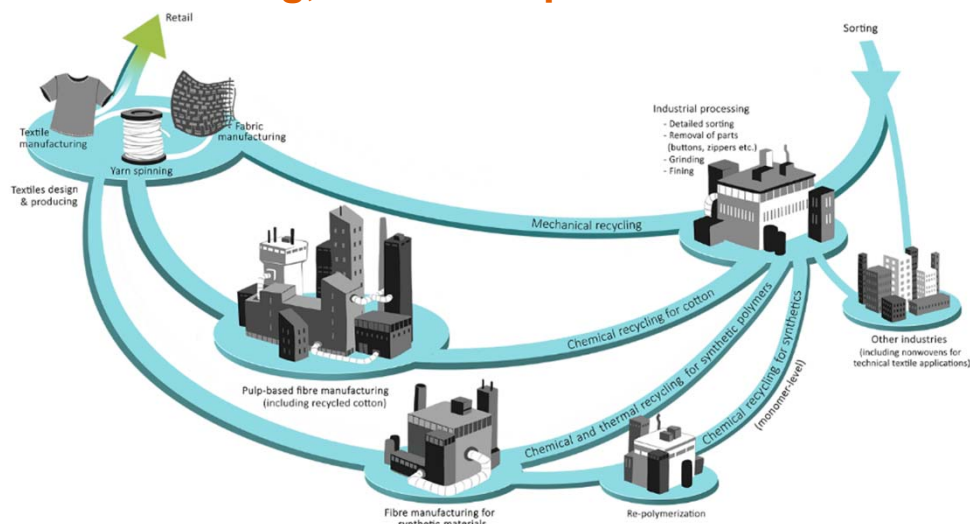
Existing – some adjustments in CE



(Fontell & Heikkilä, 2017 – <https://www.vtt.fi/inf/pdf/technology/2017/T313.pdf>)

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Some existing, but development needed for CE



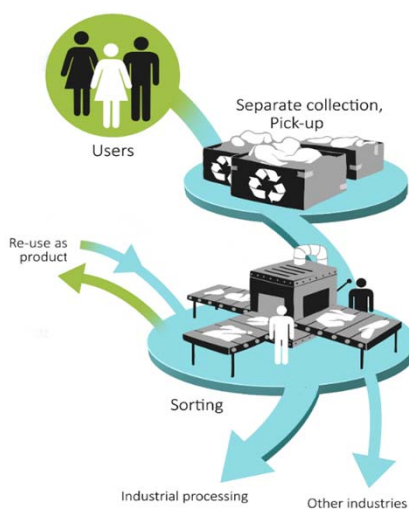
(Fontell & Heikkilä, 2017 – <https://www.vtt.fi/inf/pdf/technology/2017/T313.pdf>)

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Needs to be build for CE

EU level decisions:

- Separate collection of textile waste by 2025
- Recycling targets not stated yet

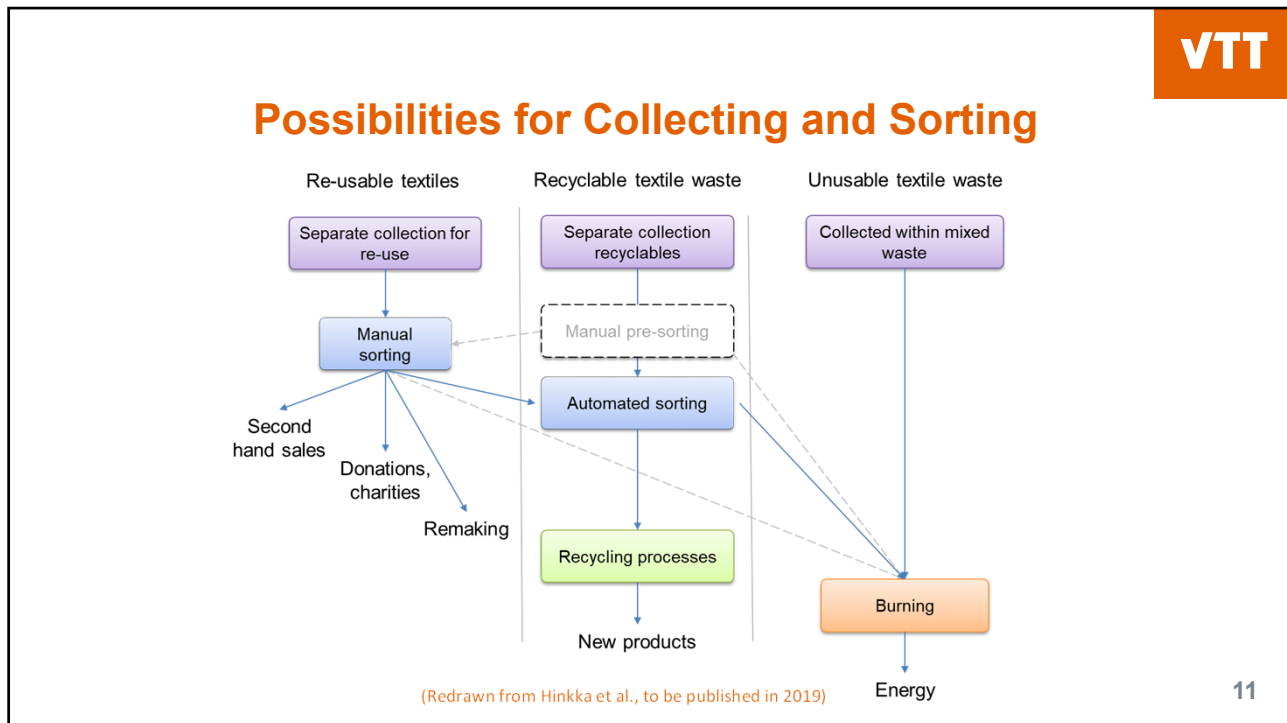


National level:

- EU countries can decide & determine how this should be organized
- Legislation expected in 2020

(Fontell & Heikkilä, 2017 – <https://www.vtt.fi/inf/pdf/technology/2017/T313.pdf>)

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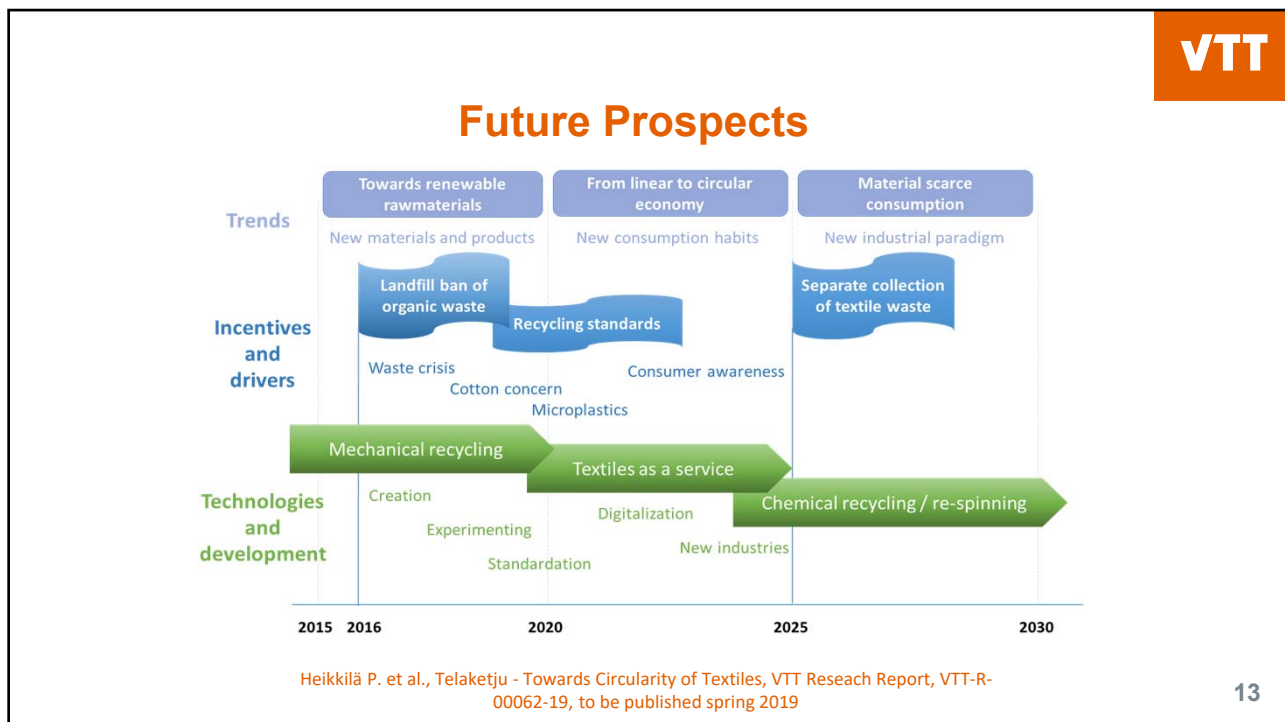


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Ecosystem & International Prospects

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International Aspects

- Recycling, also closed loops, is done by forerunners
- However...there is no extensive operational circular (eco)systems in the World, **yet**
- Therefore, there are similar needs in all countries
 - New business models, especially related to services and ownership of textiles
 - New value chains, also across different sectors
 - New partnerships
 - New innovations and development of technologies
 - Investments
 - Adjustments to regulation, incentives for developing circular solutions

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International Aspects

- Strength of different countries are different and value chains can expect to cross borders
 - Complementing value chains and industries e.g. Nordic-Baltic co-operation
 - Ensuring sufficient raw material base for certain recycling processes may need collecting of certain textile waste fraction from several countries
- New ecosystem(s) needed

Telaketju - Ecosystem Building



**Ympäristöministeriö
Miljöministeriet
Ministry of the Environment**

Topics: Collecting, sorting and pre-processing
Participants: Municipal waste management and recycling organizations, public participants, as well as charities



**Ministry of Economic Affairs
and Employment of Finland**



**Varsinais-Suomen liitto
Egentliga Finlands förbund
Regional Council of Southwest Finland**

Topics: Investments and markets & business planning

Beneficiary: Municipal waste management organization in Southwest Finland

Tekes


**BUSINESS
FINLAND**

Topics: R&D for processes, products, services
Participants: Companies, Research Institutes, Academia



www.telaketju.fi






In conclusion...

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Conclusions

- Circular economy is coming – it includes strengthening of re-use cycles as well as recycling
- This changes business value models and value chain, but continues providing new business opportunities
- New kinds of networks and ecosystem required especially in recycling
- Linear textile model has been global – circular ecosystems may be somewhat more local, but remain still multinational

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Acknowledgements

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- Project consortium on Telaketju project
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Thank you for your attention!

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